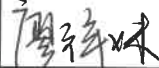


## First Article Approval Form

|                                                                                                                                                  |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Model Number                                                                                                                                     |                 |
| Part Number and Revision                                                                                                                         | 480. 01350. 005 |
| Mfg. Part Number and Revision                                                                                                                    | FA0100007810    |
| Description                                                                                                                                      | 14X14X2. 0MM    |
| Net Weight (Kg)                                                                                                                                  | 1.215g          |
| Include 2 <sup>nd</sup> process and single part<br>Manufacturer/Vendor                                                                           | 苏州天脉导热科技股份有限公司  |
| Date Code                                                                                                                                        | 2021/02/25      |
| Date Inspected                                                                                                                                   | 2021/02/25      |
| Quantity Inspected                                                                                                                               | 10pcs           |
| Reason for Report:<br><input type="checkbox"/> New Supplier<br><input type="checkbox"/> Revision Change<br><input type="checkbox"/> Resubmission |                 |
| Status:<br><input type="checkbox"/> Approved<br><input type="checkbox"/> Not Approved                                                            |                 |
| Approved by CNSBG:                                                                                                                               |                 |
| CPE1 RD Signature:                                                                                                                               |                 |
| Date:                                                                                                                                            |                 |
| CPE1 SQE Signature:                                                                                                                              |                 |
| Date:                                                                                                                                            |                 |
| CPE1 ME Signature:                                                                                                                               |                 |
| Date:                                                                                                                                            |                 |

Manufacturer/Vendor:

| Approved by |                                                                                     | Checked by       |                                                                                     |                  |                                                                                       | Prepared by |                                                                                       |
|-------------|-------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
| Signature:  |  | PD<br>Signature: |  | QE<br>Signature: |  | Signature:  |  |
| Date:       |                                                                                     | Date:            | 2021.2.26                                                                           | Date:            |                                                                                       | Date:       | 2021.2.26                                                                             |

經承認後的材料型號、製程或加工方法等,如需變更時,需經 CPE1 設計及 SQE 單位同意,供應商不得任意變更!

## Revision Log

[illegible]

# 承認書目錄

## Item

- 
1. 承認書封面
  2. Revision Log
  3. 承認書目錄
  4. 工程圖面(含美工圖面)
  5. 全尺寸量測報告書
  6. 重要尺寸製程能力分析報告(CPK)
  7. 製成條件表(含製作SOP)
  8. 材質證明
  9. 環保報告
  10. 安規及環境證明
  11. 包裝出貨方式
  12. UL報告

注：

材質證明還需包含：MCF（零件成分表）原材料物性表

原材料 MSDS 報告原材料 SGS 報告

安規及環境證明資料還需包含：

環境管理物質使用情況調查問卷

REACH 10 compliance declaration (REACH 10 符合性宣言)

出貨包裝方式還需包含包裝箱外標籤。

| VER. | MARK. | DCR/ECN NO. | DATE       | UPDATE DESCRIPTION | SIGNATURE. |
|------|-------|-------------|------------|--------------------|------------|
| 00   |       |             | XXXX.XX.XX | First Release      | XX XX      |
|      |       |             |            |                    |            |



|   |                                                 |                                                                                      |
|---|-------------------------------------------------|--------------------------------------------------------------------------------------|
| 1 | Thermal conductivity k (W/mK)                   | $\geq 5 \pm 0.4$ @ 10 psi, Th=60°C<br>(ASTM D5470 1 x 1 inch <sup>2</sup> test area) |
| 2 | Thermal Resistance R(°C/W)                      | $\leq 0.27$ @ 10 psi, Th=60°C<br>(ASTM D5470 1 x 1 inch <sup>2</sup> test area)      |
| 3 | Hardness (Shore OO)                             | 45±5 (ASTM D2240)                                                                    |
| 4 | Color                                           | LightGrey                                                                            |
| 5 | With Boron nitride filler                       | No                                                                                   |
| 6 | ESD release film ( $10^7 \sim 10^{11} \Omega$ ) | No                                                                                   |
| 7 | UL flammability rating                          | UL 94V0                                                                              |
| 8 | Supplier Part No.                               | X                                                                                    |
| 9 | Supplier Product Name (Series)                  | Tianmai TMA-5045LG                                                                   |

|                                                                                       |                                                                                                                               |                           |                   |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|
| SCALE<br>X:X                                                                          |  Foxconn Industrial Internet<br>富士康工业互联网 |                           |                   |
| SHEET<br>X/X                                                                          |                                                                                                                               |                           |                   |
| UNIT<br>mm or inch                                                                    | PART NAME<br>THERMAL PAD 14*14*2mm                                                                                            |                           |                   |
| SIZE<br>XX                                                                            | MODEL<br>&model                                                                                                               | PART NO.<br>480.01350.005 | DESIGNED<br>&name |
|  | CUSTOMER MODEL<br>N/A                                                                                                         | CUSTOMER PART NO.<br>N/A  | APPROVED<br>&name |
|                                                                                       |                                                                                                                               |                           |                   |

First Article Inspection Report（首件检查报告）

|                       |  |  |  |               |  |  |                              |  |  |  |                |  |  |  |                      |  |  |  |               |  |  |  |          |  |   |  |
|-----------------------|--|--|--|---------------|--|--|------------------------------|--|--|--|----------------|--|--|--|----------------------|--|--|--|---------------|--|--|--|----------|--|---|--|
| Part Number(料号):      |  |  |  | 480.01350.005 |  |  | Customer / Supplier(客户/供货商): |  |  |  | 苏州天脉导热科技股份有限公司 |  |  |  | Inspector(检查者):      |  |  |  | 杨小帆           |  |  |  | New:     |  | V |  |
| Part Revision(版本):    |  |  |  | A01           |  |  | Material Spec(材料标准):         |  |  |  | TMA-5045LG     |  |  |  | Submission Date(日期): |  |  |  | 2021/2/26     |  |  |  | Revised: |  |   |  |
| Part Description(品名): |  |  |  | Thermal pad   |  |  | Source(样品来源):                |  |  |  | 生产线            |  |  |  |                      |  |  |  | Resubmission: |  |  |  |          |  |   |  |

| DRAWING SPECIFICATIONS（图面规格） |          |      |                   |         |       |       | INSPECTION RESULTS（检查结果） |        |        |        |        |                        |      |      |      |      |       | INSPECTION ANALYSIS（分析） |       |         |     | Comment（建议） |                |
|------------------------------|----------|------|-------------------|---------|-------|-------|--------------------------|--------|--------|--------|--------|------------------------|------|------|------|------|-------|-------------------------|-------|---------|-----|-------------|----------------|
| ITEM                         | LOCATION | CTF  | Inspection Method | NOMINAL | +TOL  | -TOL  | Sample（样品）               |        |        |        |        | Deviation from Nominal |      |      |      |      | Mean  | % Tolerance             |       | Acc/Rej |     | Supplier    | RD Engineering |
| 顺序                           | 图纸位置     | 关键尺寸 | 检查方法              | 标称值     | (取正值) | (取负值) | #1                       | #2     | #3     | #4     | #5     | #1                     | #2   | #3   | #4   | #5   |       | UPPER                   | LOWER | HIGH    | LOW | Remarks     | Disposition    |
| 1                            | C3       | *    | CMM               | 14.00   | 0.20  | 0.20  | 14.020                   | 14.030 | 14.050 | 14.020 | 14.020 | 0.02                   | 0.03 | 0.05 | 0.02 | 0.02 | 14.03 | 25%                     | 0%    |         |     | OK          |                |
| 2                            | C3       | *    | CMM               | 14.00   | 0.20  | 0.20  | 14.030                   | 14.050 | 14.030 | 14.030 | 14.050 | 0.03                   | 0.05 | 0.03 | 0.03 | 0.05 | 14.04 | 25%                     | 0%    |         |     | OK          |                |
| 3                            | B3       | *    | CMM               | 2.00    | 0.20  | 0.20  | 2.030                    | 2.010  | 2.030  | 2.010  | 2.040  | 0.03                   | 0.01 | 0.03 | 0.01 | 0.04 | 2.02  | 20%                     | 0%    |         |     | OK          |                |
| 4                            |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 5                            |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 6                            |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 7                            |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 8                            |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 9                            |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 10                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 11                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 12                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 13                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 14                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 15                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 16                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 17                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 18                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 19                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 20                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 21                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 22                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 23                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 24                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 25                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 26                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 27                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 28                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 29                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 30                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 31                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |
| 32                           |          |      |                   |         |       |       |                          |        |        |        |        |                        |      |      |      |      |       |                         |       |         |     |             |                |

Approved by

杨珍令

Reviewed by

赵瑞琪

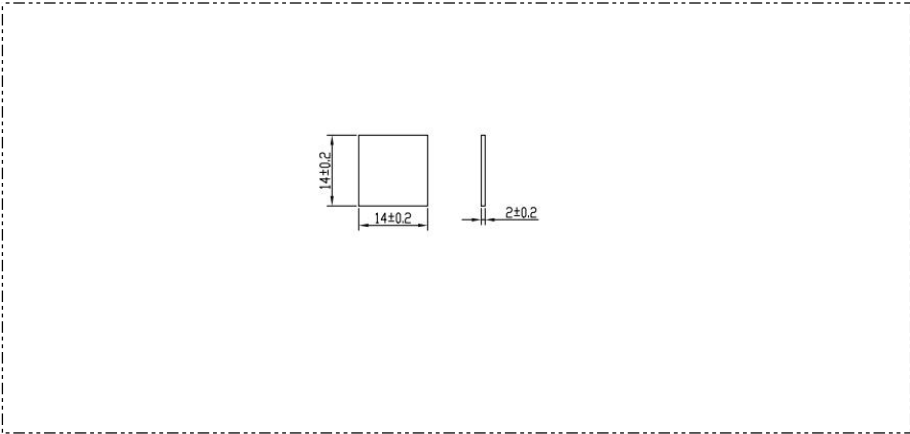
Prepared by

杨小帆

| 料号:<br>品名:             |       | 480. 01350. 005 |           |        |        | 版本     | A01    | 测量日期   |        | 2021-02-26 |        | 批量     | 35PCS  |        | 测量员    | 杨小帆    | 审核     | 赵瑞琪    | 核准     | 杨珍令    |        |        |        |        |        |        |        |        |        |        |        |
|------------------------|-------|-----------------|-----------|--------|--------|--------|--------|--------|--------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                        |       | Thermal pad     |           |        |        |        |        |        |        |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Measurement Value/ 量测值 |       |                 |           |        |        |        |        |        |        |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Item                   | Spec. | Torance +       | Torance - | 1      | 2      | 3      | 4      | 5      | 6      | 7          | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | 25     |        |        |        |
| A                      |       |                 |           | 14     | 0.20   | 0.20   | 14.020 | 14.002 | 14.083 | 14.001     | 14.051 | 14.081 | 14.073 | 14.029 | 14.020 | 14.050 | 14.024 | 14.043 | 13.996 | 14.062 | 14.045 | 14.007 | 14.046 | 14.053 | 14.043 | 14.044 | 14.035 | 14.029 | 14.077 | 14.016 | 14.007 |
|                        |       |                 |           | 26     | 27     | 28     | 29     | 30     | 31     | 32         | 33     | 34     | 35     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                        |       |                 |           | 14.050 | 14.084 | 14.055 | 14.071 | 14.078 | 14.087 | 14.088     | 14.030 | 14.027 | 14.055 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Item                   | Spec. | Torance +       | Torance - | 1      | 2      | 3      | 4      | 5      | 6      | 7          | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | 25     |        |        |        |
| B                      |       |                 |           | 14     | 0.20   | 0.20   | 14.030 | 14.026 | 14.038 | 14.058     | 14.009 | 14.007 | 14.009 | 14.079 | 14.008 | 14.037 | 14.039 | 13.975 | 14.061 | 14.049 | 13.997 | 14.048 | 13.995 | 14.002 | 13.976 | 14.067 | 14.003 | 14.047 | 14.038 | 14.063 | 13.996 |
|                        |       |                 |           | 26     | 27     | 28     | 29     | 30     | 31     | 32         | 33     | 34     | 35     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                        |       |                 |           | 14.047 | 14.063 | 14.025 | 14.050 | 14.077 | 13.976 | 14.040     | 14.003 | 14.047 | 14.084 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Item                   | Spec. | Torance +       | Torance - | 1      | 2      | 3      | 4      | 5      | 6      | 7          | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | 25     |        |        |        |
| C                      |       |                 |           | 2      | 0.2    | 0.2    | 2.067  | 2.026  | 2.030  | 2.091      | 2.062  | 2.040  | 2.031  | 2.050  | 2.058  | 2.048  | 2.030  | 2.068  | 2.062  | 2.022  | 2.041  | 2.013  | 2.045  | 2.030  | 2.007  | 2.034  | 2.085  | 2.043  | 2.009  | 1.995  | 2.046  |
|                        |       |                 |           | 26     | 27     | 28     | 29     | 30     | 31     | 32         | 33     | 34     | 35     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                        |       |                 |           | 2.029  | 2.096  | 2.008  | 2.048  | 2.030  | 2.003  | 2.083      | 2.048  | 2.095  | 2.078  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Item                   | Spec. | Torance +       | Torance - | 1      | 2      | 3      | 4      | 5      | 6      | 7          | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | 25     |        |        |        |
| D                      |       |                 |           |        |        |        |        |        |        |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                        |       |                 |           | 26     | 27     | 28     | 29     | 30     | 31     | 32         | 33     | 34     | 35     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|                        |       |                 |           |        |        |        |        |        |        |            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |

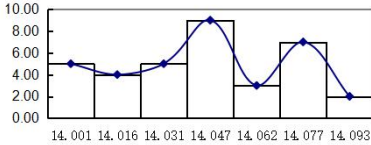
| Engineering Specification |             |       |       |      |   |
|---------------------------|-------------|-------|-------|------|---|
| 工程尺寸                      |             | A     | B     | C    | D |
| 工程规格                      | product spc | 14    | 14    | 2    |   |
| 正公差                       | Tolerance   | 0.2   | 0.2   | 0.2  |   |
| 负公差                       | Tolerance   | 0.2   | 0.2   | 0.2  |   |
| 工程上限                      | USL         | 14.2  | 14.2  | 2.2  |   |
| 工程下限                      | LSL         | 13.8  | 13.8  | 1.8  |   |
| Actual Data               |             |       |       |      |   |
| 量测尺寸                      |             | A     | B     | C    | D |
| 平均数                       | X bar       | 14.04 | 14.03 | 2.04 |   |
| 标准差                       | Sigma       | 0.03  | 0.03  | 0.03 |   |
| 中间值                       | Median      | 14.05 | 14.04 | 2.04 |   |
| 众数                        | Mode        | 14.02 | 14.05 | 2.03 |   |
| 最大值                       | Max         | 14.09 | 14.08 | 2.10 |   |
| 最小值                       | Min         | 14.00 | 13.98 | 2.00 |   |
| UCL                       | 1 Sigma     | 14.07 | 14.06 | 2.07 |   |
|                           | 2 Sigma     | 14.10 | 14.09 | 2.10 |   |
|                           | 3 Sigma     | 14.13 | 14.12 | 2.12 |   |
| LCL                       | 1 Sigma     | 14.02 | 14.00 | 2.02 |   |
|                           | 2 Sigma     | 13.99 | 13.97 | 1.99 |   |
|                           | 3 Sigma     | 13.96 | 13.94 | 1.96 |   |
| 制程能力                      | 雙邊CP        | 2.47  | 2.19  | 2.46 |   |
|                           | 單邊CPL       | 3.02  | 2.52  | 3.00 |   |
|                           | 單邊CPU       | 1.92  | 1.85  | 1.92 |   |
|                           | 單邊CP        | 1.92  | 1.85  | 1.92 |   |
|                           | Ca          | 0.22  | 0.15  | 0.22 |   |
|                           | Cpk         | 1.92  | 1.85  | 1.92 |   |

Remark 备注

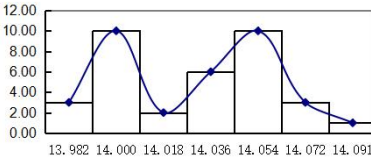


| A      |      | B      |       | C     |       | D       |      |
|--------|------|--------|-------|-------|-------|---------|------|
| 组别     | 次数   | 组别     | 次数    | 组别    | 次数    | 组别      | 次数   |
| 14.001 | 5.00 | 13.982 | 3.00  | 2.001 | 5.00  | #VALUE! | 0.00 |
| 14.016 | 4.00 | 14.000 | 10.00 | 2.018 | 3.00  | #VALUE! | 0.00 |
| 14.031 | 5.00 | 14.018 | 2.00  | 2.035 | 10.00 | #VALUE! | 0.00 |
| 14.047 | 9.00 | 14.036 | 6.00  | 2.051 | 7.00  | #VALUE! | 0.00 |
| 14.062 | 3.00 | 14.054 | 10.00 | 2.068 | 4.00  | #VALUE! | 0.00 |
| 14.077 | 7.00 | 14.072 | 3.00  | 2.085 | 4.00  | #VALUE! | 0.00 |
| 14.093 | 2.00 | 14.091 | 1.00  | 2.102 | 2.00  | #VALUE! | 0.00 |

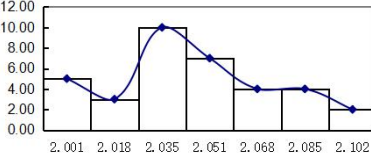
Dimension A



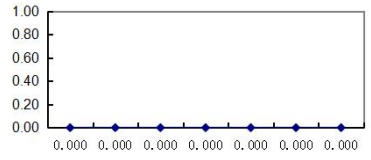
Dimension B



Dimension C



Dimension D



# 导热片操作指导书



苏州天脉导热科技股份有限公司

| 制定者 | 指定日期       | 页次 | 版本  |
|-----|------------|----|-----|
| 张文统 | 2016.07.27 | 1  | A/0 |



<图一>



<图二>



<图三>



<图四>



<图五>



<图六>



<图七>



<图八>



<图九>

**注意事项：**使用导热片之前请确认附着表面清洁，如无法确认或保证，请先将附着表面擦拭干净，否则油污或灰尘将影响导热片的附着状况，形成导热片不粘，有气泡等情形，且影响导热片的导热效能。

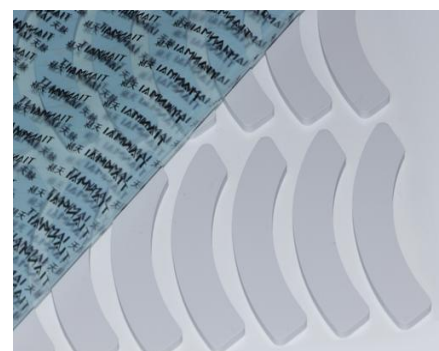
清洁剂溶剂：建议使用无水乙醇、去渍水、异丙醇。

## 操作步骤

1. 检查被贴物表面是否有脏污，确认OK后平放。（图一）
2. 取出产品，将底膜如图翘起。（图二，图三）
3. 贴之前，请确认产品方向与被贴物面对应，正确对应如（图五）。确认正确后，将被贴物边缘与产品边缘对齐，缓缓拉动底膜直至产品完全贴在被贴物上。（图四，图五），如果没有贴好，可以重复贴。
4. 将蓝色上膜拉手部位翻折180度，从拉手位缓缓拉动上膜直至上膜全部撕掉。（图六，图七，图八，图九）



## TMA-5045LG 导热硅胶片



### 描述

TMA-5045LG导热硅胶片是以硅橡胶为基体，填充以高导热的陶瓷粉末制成，具有良好的导热性和绝缘性，TMA-5045LG具有高压缩、低热阻的特点。

### 特点

- 不含任何有害物质、绝缘、优异的阻燃性能、耐高低温性能、高压缩性能
- 低出油率
- 优异的导热性能、可以用于填充结构缝隙

### 应用

- 发热元器件
- 网络网通设备
- 电脑 ( NB&DESK TOP )
- 投影仪
- 监控产业
- 智能手机
- 车载电子设备

## 典型性能 (5.0 W/m.K)

| 项 目             |      | 单 位                   | TMA-5045LG       | 测试标准              |
|-----------------|------|-----------------------|------------------|-------------------|
| 颜色              |      | /                     | 浅灰色              | 目视                |
| 密度              |      | g/cm <sup>3</sup>     | 3.1              | ASTM D792         |
| 厚度 ( ±10% )     |      | mm                    | 0.5~2.0          | ASTM D374         |
| 导热系数            |      | W/m.K                 | 5.0              | ASTM D5470 Modify |
| 热阻@20psi 1.0mm  |      | °C.in <sup>2</sup> /W | 0.27             | ASTM D5470 Modify |
| 压缩率@20psi 1.0mm |      | %                     | 28               | —                 |
| 硬度              |      | Shore OO              | 45               | ASTM D2240        |
| 抗电强度            |      | KV/mm                 | 6                | ASTM D149         |
| 介电常数            | 50Hz | /                     | 7.62             | ASTM D150         |
|                 | 1KHz | /                     | 7.46             |                   |
|                 | 1MHz | /                     | 7.37             |                   |
| 体积电阻率           |      | Ω.cm                  | 10 <sup>13</sup> | GB/T 1410         |
| 阻燃等级            |      | /                     | V0               | UL 94             |
| 使用温度            |      | °C                    | -40~+ 150        | —                 |
| 自粘性             |      | /                     | 双面粘              | —                 |

注：1. 单面粘型号：TMA-5045LGX；

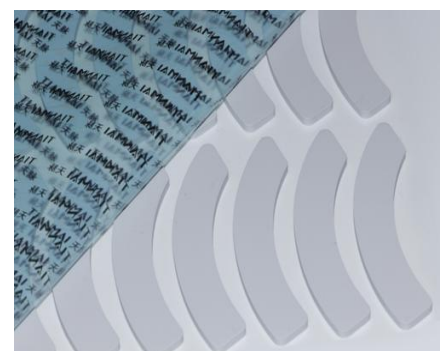
2. 以上数据仅为本公司实验室条件下测试结果，不同实验室应用不同测试条件、仪器、环境时可能会有偏差，谨此声明。

版本：S11



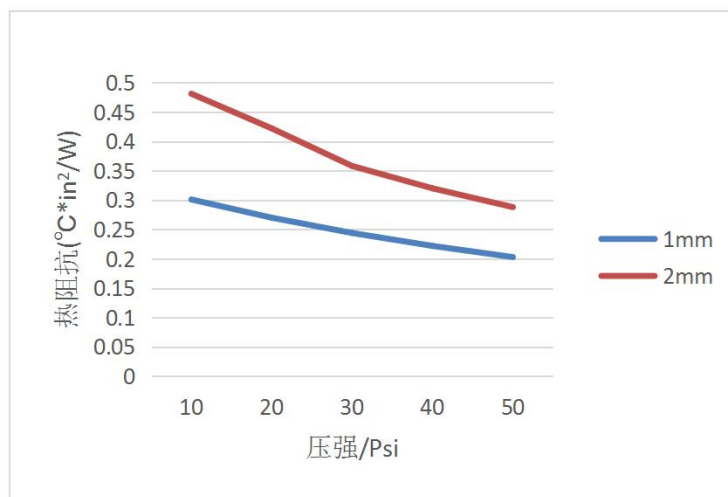
# TMA-5045LG

## 导热硅胶片



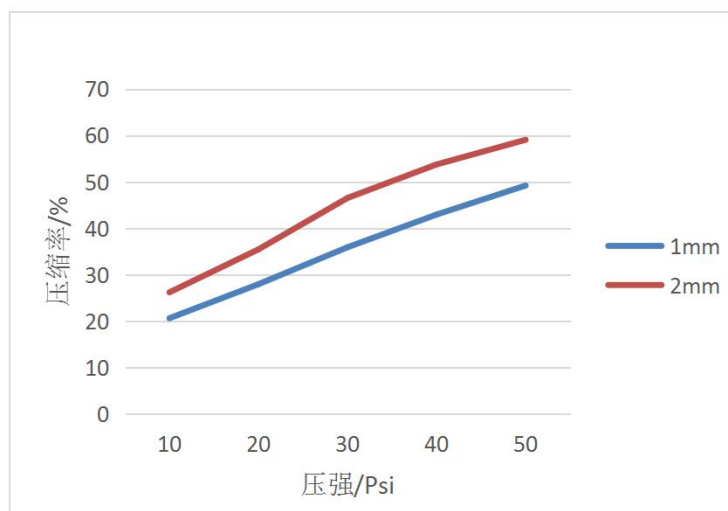
### TMA-5045LG热阻与压强的关系

| 压强/Psi | TMA-5045LG 热阻/ $^{\circ}\text{C}\cdot\text{in}^2/\text{W}$ |       |
|--------|------------------------------------------------------------|-------|
|        | 1.0mm                                                      | 2.0mm |
| 10     | 0.301                                                      | 0.481 |
| 20     | 0.270                                                      | 0.422 |
| 30     | 0.244                                                      | 0.358 |
| 40     | 0.222                                                      | 0.320 |
| 50     | 0.203                                                      | 0.288 |



### TMA-5045LG压缩率与压强的关系

| 压强/Psi | TMA-5045LG 压缩率/% |       |
|--------|------------------|-------|
|        | 1.0mm            | 2.0mm |
| 10     | 20.61            | 26.20 |
| 20     | 27.96            | 35.47 |
| 30     | 35.92            | 46.55 |
| 40     | 42.97            | 53.78 |
| 50     | 49.23            | 59.09 |





# 苏州天脉导热科技股份有限公司

## 物质安全资料表 Material Safety Data

MSDS NO. TM-MSDS-TMA-5045LG-D

Effective Date: 2020.05.24

### 第一部分:物品名称与厂商资料

The first part: Identification Of The Substance / Preparation And Company.

|                               |                                                               |                   |               |                      |                                                                                 |
|-------------------------------|---------------------------------------------------------------|-------------------|---------------|----------------------|---------------------------------------------------------------------------------|
| 物品名称<br>Product Name          | 导热硅胶垫<br>Thermal Conductive Pad                               | 别名<br>Synonyms    | -             | 物品编号<br>Product Code | TMA-5045LG                                                                      |
| 生产企业<br>Manufacturer/Supplier | 苏州天脉导热科技股份有限公司<br>Suzhou Tianmai Thermal Technology Co., Ltd. |                   |               | 地址<br>Address        | 苏州市吴中区角直镇港升路9号<br>9# GangSheng Road, LuZhi Town, WuZhong District, SuZhou City. |
| 紧急联络人<br>Emergency Contact    | 沈锋华                                                           | 联系电话<br>Telephone | 0512-66028722 | 传真<br>Fax            | 0512-66028733                                                                   |

### 第二部分:成份辨识数据

The Second Part: Composition/Information On Ingrdients

|                                            |                              |                                   |                             |                                         |
|--------------------------------------------|------------------------------|-----------------------------------|-----------------------------|-----------------------------------------|
| 总体化学品描述<br>General Chemical Description    |                              | 硅胶<br>Silicone                    | 纯品 <input type="checkbox"/> | 混合物 <input checked="" type="checkbox"/> |
| 配制品基本成分<br>Base Substances of Preparation  |                              |                                   |                             |                                         |
| 组成成分<br>Components                         |                              | EC-No                             | CAS-No.                     | 含量（浓度范围）%<br>Concentration/Percentage   |
| 甲基乙 烯基硅橡胶<br>Silicone                      |                              | -                                 | 68037-87-6                  | ≤7                                      |
| 氧化铝<br>Aluminum oxide                      |                              | 215-691-6                         | 1344-28-1                   | ≥75                                     |
| 氮化铝<br>Aluminum nitride                    |                              | 246-140-8                         | 24304-00-5                  | ≤15                                     |
| 保密成分<br>Secret ingredient                  |                              | ——                                | ——                          | ≤3                                      |
| 危险有害成分<br>Dangerous and harmful components |                              |                                   |                             |                                         |
| NO.                                        | 有害物成分<br>Harmful Ingredients | 含量（%）<br>Concentration/Percentage |                             | CAS No.                                 |
| NO                                         | 无<br>NO                      | 无<br>NO                           |                             | 无<br>NO                                 |

### 第三部分:危险性概述

The Third Part: Hazards Identification

|                                                                                                                                                                                                                                                                                                   |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 按照良好的工业卫生和安全惯例,在正常使用条件下使用,此产品不存在任何特定的危险。<br>This product does not present any particular hazard provided it is handled in accordance with good industrial hygiene and safety practice and under normal conditions of use. Following our present state of knowledge this product is not classified |       |
| 健康危害效应<br>Health Hazards Effects                                                                                                                                                                                                                                                                  | None. |
| 环境影响<br>Environmental Impact                                                                                                                                                                                                                                                                      | None. |
| 物理和化学危害<br>Physical and Chemical Risks                                                                                                                                                                                                                                                            | None. |
| 危险分类项目<br>Hazard Classification                                                                                                                                                                                                                                                                   | N/A.  |

### 第四部分:急救措施

The Fourth Part: Fire Aid Measure

|                                                  |                                                                                                                       |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 皮肤接触<br>Skin Contact                             | 不适用。用水清洗。<br>No information is available. Wash with water.                                                            |
| 吸入<br>Inhalation                                 | 不适用。<br>Not applicable                                                                                                |
| 眼睛接触<br>Eye Contact                              | 不适用。及时用流动清水冲洗并及时就医。<br>No information is available, Immediately flush eyes with plenty of water and consult a doctor. |
| 食入<br>Ingestion                                  | 不适用。及时就医<br>No information is available, Immediately induce vomiting and consult a doctor.                            |
| 应急措施者的保护<br>The emergency measures of protection | 不适用<br>Not applicable                                                                                                 |



# 苏州天脉导热科技股份有限公司

## 物质安全资料表

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Effective Date: 2020.05.24

|                             |                       |
|-----------------------------|-----------------------|
| 医生提示<br>Tip of the doctors: | 不适用<br>Not applicable |
|-----------------------------|-----------------------|

### 第五部分:消防措施

#### The Fifth Part: Fire Fighting Measure

|                                          |                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 灭火剂<br>Suitable<br>extinguishing agent   | 消防龙头, 泡沫, 粉末灭火剂、二氧化碳灭火剂等。<br>Fire hydrants, bubble, the powder fire extinguishing agent, carbon dioxide fire extinguishing agent, etc.                                                                                                                                                                                                                    |
| 火灾时特定的危害<br>Specific exposure<br>hazards | 无<br>No                                                                                                                                                                                                                                                                                                                                                   |
| 灭火方法<br>Extinguishing method             | 去上风头, 赶紧切断附近的着火源、用灭火剂立刻在上风头灭火。放水灭火的同时, 避免造成环境的影响, 采取一定的措施不要使物质四处流淌。<br>Immediately to the tuyere, hurriedly cut off near the ignition source, and immediately with the extinguishing agent from the tuyere on fire. To avoid damage to the environment, while put out the fire with water, take some measures to prevent material flowing with the water. |
| 灭火注意事项<br>Matters need                   | 灭火时注意使用防护用具。<br>Use protective gear when fire extinguishing                                                                                                                                                                                                                                                                                               |

### 第六部分:泄露处理方法

#### The Sixth Part: Accidental Release Measures

|                                                       |                       |
|-------------------------------------------------------|-----------------------|
| 个人注意事项<br>Should pay attention<br>to personal matters | 不适用<br>Not applicable |
| 环保注意事项<br>Should pay attention<br>to personal matters | 不适用<br>Not applicable |
| 清洁方法<br>Cleaning Method                               | 不适用<br>Not applicable |

### 第七部分:安全处置与储存方法

#### The Seventh Part: Handling and Storage

|                                            |                                                                      |
|--------------------------------------------|----------------------------------------------------------------------|
| 处理<br>Handling                             | 不需要任何具体的处理程序。<br>Does not require any specific handling procedure.   |
| 储存<br>Storage                              | 低温干燥, 远离明火。<br>Store in a cool place, Keep away from heat and flame. |
| 应避免情况<br>The material should<br>be avoided | 避免与强碱、强酸接触。<br>Avoid contact with strong alkalis and strong acids.   |

### 第八部分:暴露预防措施

#### The Eighth Part: Exposure Control/Personal Protection

|                              |                                                 |
|------------------------------|-------------------------------------------------|
| 工程控制<br>Engineering Control  | 避免阳光直射<br>Don't expose under sunshine directly. |
| 卫生措施<br>Hygienic procedures  | 无资料 (N/A)                                       |
| 技术对策<br>Technical measures   | 无特别适用。<br>Not specifically applicable.          |
| 个人能防护<br>Personal protective | 无特别适用。<br>Not specifically applicable.          |

### 第九部分:理化特性

#### The Ninth Part :Physical Protective Equipment

|                                      |                       |                                          |                    |
|--------------------------------------|-----------------------|------------------------------------------|--------------------|
| 材料形态<br>Material status              | 固体<br>Solid           | 形状<br>Form                               | 片状<br>In piece     |
| 颜色<br>Color                          | 浅灰色<br>Light Grey     | 气味<br>Odor                               | 无刺激性气味<br>Odorless |
| PH 值<br>PH Value                     | 不适用<br>Not applicable | 沸点/沸点范围<br>BoilingPoint/Boiling<br>Range | 不适用 (N/A)          |
| 分解温度<br>Decomposition<br>Temperature | 无资料 (N/A)             | 闪光点<br>Flash Point                       | 无数据 (N/A)          |



# 苏州天脉导热科技股份有限公司

## 物质安全资料表

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Effective Date: 2020.05.24

|                                 |                       |                           |                              |
|---------------------------------|-----------------------|---------------------------|------------------------------|
| 自燃温度<br>Spontaneous Temperature | 无资料 (N/A)             | 爆炸极限<br>Explosion limits: | 不适用<br>Not applicable        |
| 蒸气压<br>Vapor pressure           | 不适用<br>Not applicable | 蒸汽密度<br>Steam density     | 不适用<br>Not applicable        |
| 水中溶解性<br>Solubility in Water    | 不溶解<br>Not soluble    | 密度<br>Specific Gravity    | 3.1g/cm <sup>3</sup> (25° C) |

### 第十部分:稳定性和反应活性

#### The first ten parts: Stability and Reactivity

|                                   |                                                                          |                                                                           |                                                                                                                                                              |
|-----------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 稳定性<br>Stability                  | 一般情况下稳定, 不具有反应性。<br>Stable under normal circumstances, and no reactivity | 特殊情况下可能的危害<br>反应<br>Under the special situation of possible harm reaction | 燃烧或热分解有毒气体可能被释放的碳氧化物 (CO + CO <sub>2</sub> )<br>On combustion or thermal decomposition toxic gases may be released as oxides of carbon (CO+CO <sub>2</sub> ) |
| 分解危害<br>Decomposition of hazards: | 不适用<br>Not applicable                                                    |                                                                           |                                                                                                                                                              |

### 第十一部分:毒理学资料

#### The Eleventh Part:Toxicological Information

|                                       |                                          |
|---------------------------------------|------------------------------------------|
| 刺激性(皮肤、眼睛):<br>Irritation (Skin, Eye) | 无适用信息<br>No known applicable information |
| 消毒性:<br>Sanitizers                    | 无适用信息<br>No known applicable information |
| 急性毒性:<br>Acute Toxicity               | 无适用信息<br>No known applicable information |
| 慢性毒性:<br>Chronic Toxicity             | 无适用信息<br>No known applicable information |
| 致癌性:<br>Carcinogenicity               | 无适用信息<br>No known applicable information |
| 致突变性:<br>Mutagenicity                 | 无适用信息<br>No known applicable information |
| 生殖毒性:<br>Reproductive Toxins          | 无适用信息<br>No known applicable information |
| 致畸性:<br>Teratogens                    | 无适用信息<br>No known applicable information |
| 其他信息:<br>Other Information            | 无适用信息<br>No known applicable information |

### 第十二部分:生态学资料

#### The Twelfth Part:Ecological Information

|                                       |                                                                                                                                                                                             |                                    |  |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--|
| 持久性/可降解性<br>Persistence/Degradability | 本产品土壤中仍然存在。<br>This product persists in the soil.                                                                                                                                           | 可能的影响/效果<br>Possible impact/effect |  |
| 可能造成的影响/效果<br>Possible impact/effect  | 不分散。此产品不应该构成任何特定的环境问题。<br>Not dispersible. This product should not pose any specific problem to the environment.                                                                            |                                    |  |
| 产品最终结果<br>Destination of the product  | 成品作为一个非常小的比例, 在适当情况下未使用的产品通常是填埋/焚烧。<br>As a very small percentage of a finished product this cannot be determined. Unused product is typically land filled / incinerated where appropriate. |                                    |  |

### 第十三部分:废弃处置

#### The Thirteenth Part:Disposal Information

|                                              |                                                                                                                                                                                                                                                                     |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 残渣废料<br>Waste from residues                  | 对于非再生产品, 按照当地法规处置。它可以交由政府部门指定处理的有资质的公司进行处理 允许小批量分批次焚烧处理。<br>For non recycled product dispose of in accordance with local regulations, Entrusted to the government departments designated qualified company for processing, allowing small batch batch incineration. |
| 污染的包装容器<br>Packaging containers contaminated | 根据国家法规废弃处理。<br>According to the state regulations, waste treatment.                                                                                                                                                                                                 |

### 第十四部分:运输信息

#### The Fourteenth Part:Transport Information



# 苏州天脉导热科技股份有限公司

## 物质安全资料表

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### Material Safety Data

Effective Date: 2020.05.24

|                             |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| 运输注意事项<br>Transport Note    | 一般运输，但要注意保护性包装，以防止碰撞受伤。<br>general transport, but pay attention to protective packaging to prevent collision injuries. |
| 法律、法规<br>Legal, regulations | 国内遵守国家法规。出口遵守国际法规。<br>Domestic abide by national laws and regulations. Exports comply with international regulations.  |

第十五部分:法规信息

The Fifteenth Part:Regulation Information

|                             |                                                                                                                       |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 法律、法规<br>Legal, regulations | 国内遵守国家法规。出口遵守国际法规。<br>Domestic abide by national laws and regulations. Exports comply with international regulations. |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|

第十六部分:其他信息

The Sixteenth Part: Other Information

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                |                     |                  |                     |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------|------------------|---------------------|
| 备注<br>Remarks                | 所记载内容没有调查所有的资料和文献，有可能有不全之处。随着新资料或文献的发布可能会变更其中的内容。 这里的数据不代表每批的保证值。 另：以上所有的注意事项是针对通常的作业对象。 不适用特殊的作业环境。<br>Recorded content without investigation, all of the data and literature, there may be incomplete. With the release of new information or documents may change its contents. The data do not represent each batch to ensure that the value of. Other: all of the above considerations is the job object. Do not apply to special working environment.        |                |                     |                  |                     |
| 其他信息<br>Other Information    | 免责声明：此信息并不提供担保，明示或暗示，除了它是精确到苏州天脉所知。 它仅涉及到的具体材料指定外，并没有涉及结合使用的任何其他材料或过程。苏州天脉不承担对本使用或依赖法律责任信息。<br>Disclaimer: this information does not provide warranty, express or implied, except that it is Suzhou Tianmai accurate to know. It pertains only to the specific material designation, did not involve in combination with any other materials or processes used. Suzhou Tianmai does not assume legal responsibility for the use of or reliance on the information. |                |                     |                  |                     |
| 修改说明<br>Revision Description | 公司名称变更 Company name changed                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |                     |                  |                     |
| 核准<br>Approver               | 谢毅<br>Yi.Xie                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 审核<br>Verifier | 刘晓阳<br>XiaoYang.Liu | 制表人<br>Tabulator | 陈红梅<br>HongMei.Chen |

# 检测报告



报告编号 A2210048288101004C

第 1 页 共 7 页

报告抬头公司名称 苏州天脉导热科技股份有限公司

地 址 江苏省苏州市吴中区角直镇港升路9号

以下测试之样品及样品信息由申请者提供并确认

样品名称 导热片

样品型号 TMA全系

样品接收日期 2021. 02. 09

样品检测日期 2021. 02. 09-2021. 02. 23

**检测要求** 根据客户要求, 对所提交样品中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs), 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP), 氟(F), 氯(Cl), 溴(Br), 碘(I), 聚氯乙烯(PVC)进行测试。

**检测依据** 请参见下页。

**检测结果** 请参见下页。



金仁杰

宋岩

宋岩

技术经理

苏州市华测检测技术有限公司

审 核

张园园

日 期

2021. 02. 23

No. R449751340

江苏省苏州市相城区澄阳路3286号

# 检测报告

报告编号 A2210048288101004C

第 2 页 共 7 页

## 检测依据

| 测试项目                         | 测试方法                                        | 测试仪器           |
|------------------------------|---------------------------------------------|----------------|
| 铅(Pb)                        | IEC 62321-5:2013                            | ICP-OES        |
| 镉(Cd)                        | IEC 62321-5:2013                            | ICP-OES        |
| 汞(Hg)                        | IEC 62321-4:2013+AMD1:2017 CSV              | ICP-OES        |
| 六价铬(Cr(VI))                  | IEC 62321-7-2:2017和/或IEC 62321-5:2013测试总铬含量 | UV-Vis/ICP-OES |
| 多溴联苯(PBBs)                   | IEC 62321-6:2015                            | GC-MS          |
| 多溴二苯醚(PBDEs)                 | IEC 62321-6:2015                            | GC-MS          |
| 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP) | IEC 62321-8:2017                            | GC-MS          |
| 氟(F)                         | 参考EN 14582:2016                             | IC             |
| 氯(Cl)                        | 参考EN 14582:2016                             | IC             |
| 溴(Br)                        | 参考EN 14582:2016                             | IC             |
| 碘(I)                         | 参考EN 14582:2016                             | IC             |
| 聚氯乙烯(PVC)                    | 参考JY/T 001-1996                             | FT-IR          |

# 检测报告

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## 检测结果

| 测试项目         | 结果    | 方法检出限   |
|--------------|-------|---------|
| 铅 (Pb)       | N. D. | 2 mg/kg |
| 镉 (Cd)       | N. D. | 2 mg/kg |
| 汞 (Hg)       | N. D. | 2 mg/kg |
| 六价铬 (Cr(VI)) | N. D. | 8 mg/kg |

| 测试项目        | 结果    | 方法检出限   |
|-------------|-------|---------|
| 多溴联苯 (PBBs) |       |         |
| 一溴联苯        | N. D. | 5 mg/kg |
| 二溴联苯        | N. D. | 5 mg/kg |
| 三溴联苯        | N. D. | 5 mg/kg |
| 四溴联苯        | N. D. | 5 mg/kg |
| 五溴联苯        | N. D. | 5 mg/kg |
| 六溴联苯        | N. D. | 5 mg/kg |
| 七溴联苯        | N. D. | 5 mg/kg |
| 八溴联苯        | N. D. | 5 mg/kg |
| 九溴联苯        | N. D. | 5 mg/kg |
| 十溴联苯        | N. D. | 5 mg/kg |

| 测试项目          | 结果    | 方法检出限   |
|---------------|-------|---------|
| 多溴二苯醚 (PBDEs) |       |         |
| 一溴二苯醚         | N. D. | 5 mg/kg |
| 二溴二苯醚         | N. D. | 5 mg/kg |
| 三溴二苯醚         | N. D. | 5 mg/kg |
| 四溴二苯醚         | N. D. | 5 mg/kg |
| 五溴二苯醚         | N. D. | 5 mg/kg |
| 六溴二苯醚         | N. D. | 5 mg/kg |
| 七溴二苯醚         | N. D. | 5 mg/kg |
| 八溴二苯醚         | N. D. | 5 mg/kg |
| 九溴二苯醚         | N. D. | 5 mg/kg |
| 十溴二苯醚         | N. D. | 5 mg/kg |

# 检测报告

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## 检测结果

| 测试项目                                    | 结果    | 方法检出限    |
|-----------------------------------------|-------|----------|
| <b>邻苯二甲酸酯 (DBP, BBP, DEHP, DIBP)</b>    |       |          |
| 邻苯二甲酸二丁酯 (DBP)<br>CAS#: 84-74-2         | N. D. | 50 mg/kg |
| 邻苯二甲酸丁基苄基酯 (BBP)<br>CAS#: 85-68-7       | N. D. | 50 mg/kg |
| 邻苯二甲酸二(2-乙基)己酯 (DEHP)<br>CAS#: 117-81-7 | N. D. | 50 mg/kg |
| 邻苯二甲酸二异丁酯 (DIBP)<br>CAS#: 84-69-5       | N. D. | 50 mg/kg |
| 测试项目                                    | 结果    | 方法检出限    |
| 氟 (F)                                   | N. D. | 10 mg/kg |
| 氯 (Cl)                                  | N. D. | 10 mg/kg |
| 溴 (Br)                                  | N. D. | 10 mg/kg |
| 碘 (I)                                   | N. D. | 10 mg/kg |
| 测试项目                                    | 结果    | 方法检出限    |
| 聚氯乙烯 (PVC)                              | 阴性    | /        |

样品/部位描述 灰色固体

备注: 对于检测铅, 镉, 汞之样品已完全溶解。

-N.D. = 未检出 (小于方法检出限)

-mg/kg = ppm = 百万分之一

-阴性表示不含有聚氯乙烯 (PVC)

注释: 本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。

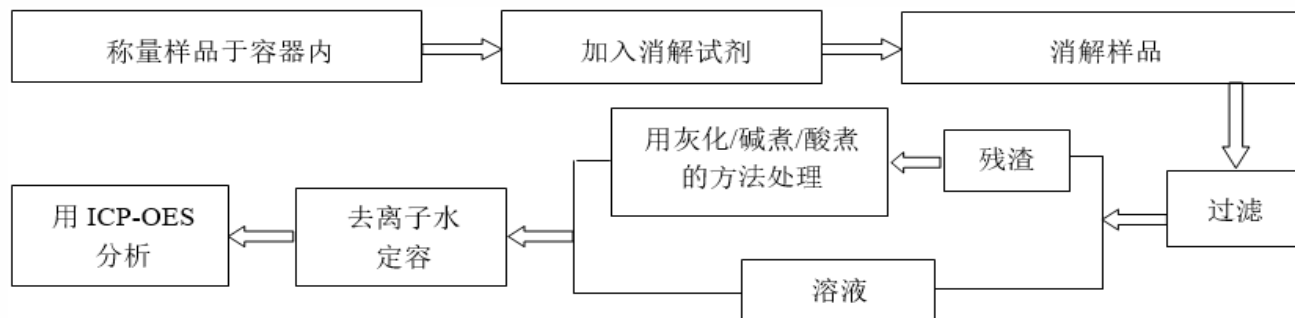
# 检测报告

报告编号 A2210048288101004C

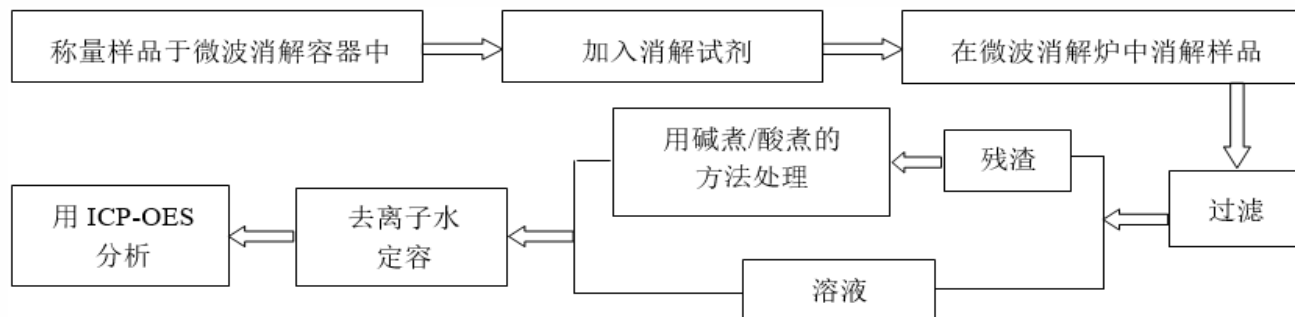
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## 检测流程

### 1. 铅(Pb), 镉(Cd), 铬(Cr)



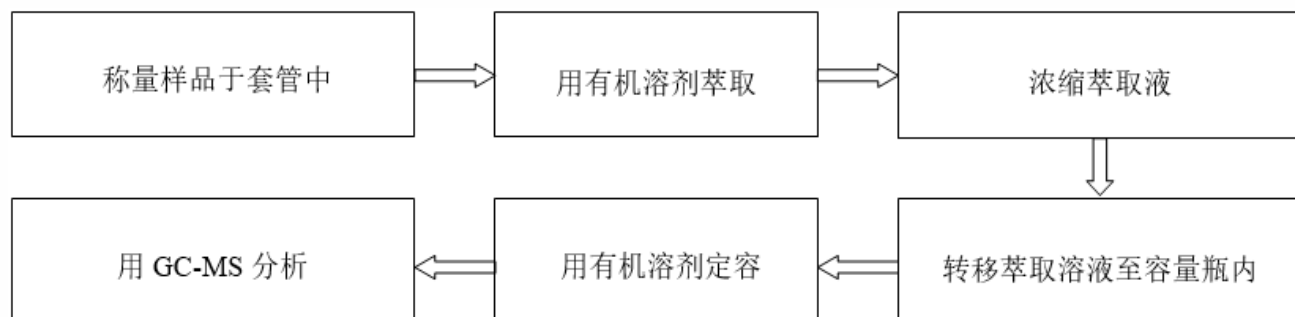
### 2. 汞(Hg)



### 3. 六价铬(Cr(VI))



### 4. 多溴联苯(PBBs), 多溴二苯醚(PBDEs)

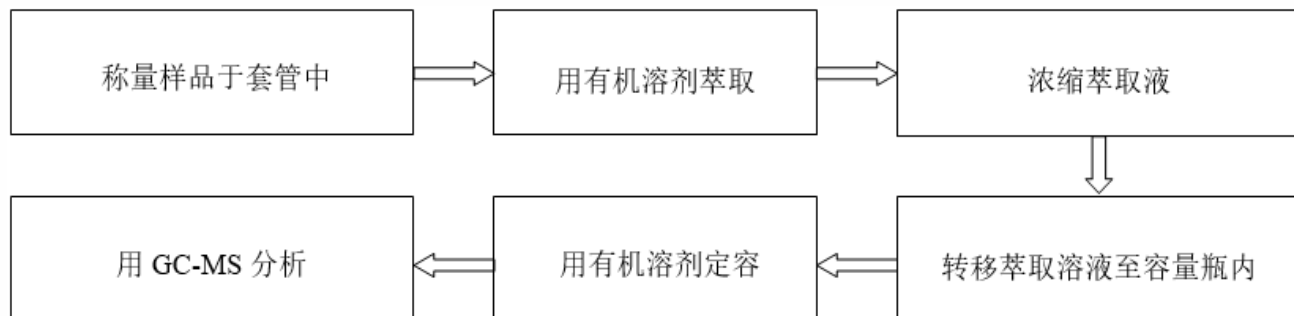


# 检测报告

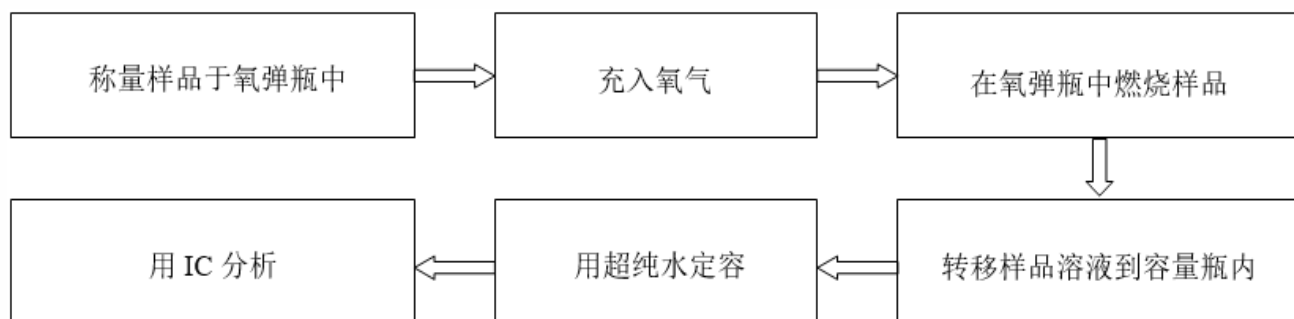
报告编号 A2210048288101004C

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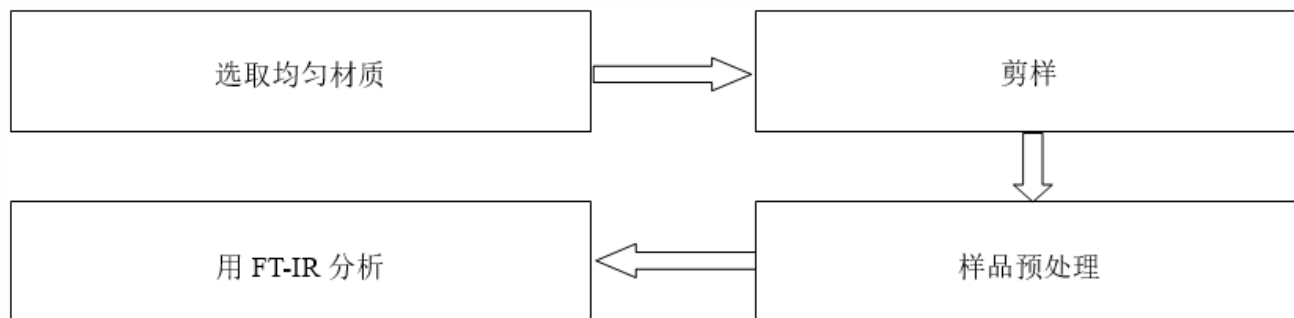
## 5. 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)



## 6. 氟(F), 氯(Cl), 溴(Br), 碘(I)



## 7. 聚氯乙烯(PVC)

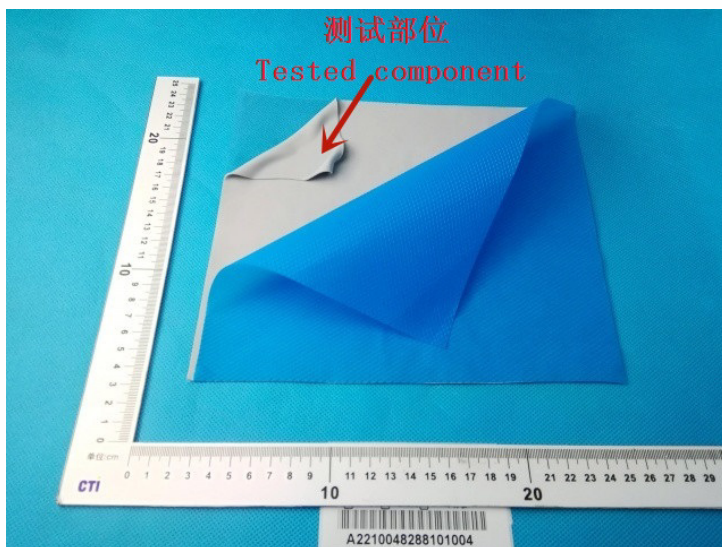


# 检测报告

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## 样品图片



声明:

1. 检测报告无批准人签字、“专用章”及报告骑缝章无效;
2. 报告抬头公司名称及地址、样品及样品信息由申请者提供, 申请者应对其真实性负责, CTI未核实其真实性;
3. 本报告检测结果仅对受测样品负责;
4. 未经CTI书面同意, 不得部分复制本报告。

\*\*\* 报告结束 \*\*\*

包 装 规 格

| 产品规格（mm）    | 离型纸     |    | 片     |               | 包       |               | 纸箱          |               |               | 备注 |
|-------------|---------|----|-------|---------------|---------|---------------|-------------|---------------|---------------|----|
|             | 规格      | 条数 | 刀数    | 总数<br>（PCS/片） | 片数（片/包） | 总数<br>（PCS/包） | 包数（包<br>/箱） | 总数<br>（PCS/箱） | 纸箱规格（L*W*T）   |    |
| 14X14X2.0MM | 400*210 | /  | 28*14 | 392           | 10      | 3920          | 2           | 7840          | 420*250*100mm |    |

\*仅供参考，根据实际订单量修改包装数量。

QMFZ2.E488741 - Plastics - Component

Plastics - Component

See General Information for Plastics - Component

**SUZHOU TIANMAI THERMAL TECHNOLOGY CO LTD**  
9 GANGSHENG RD LUZHI TOWN WUZHONG DISTRICT  
SUZHOU, JIANGSU 215127 CHINA

E488741

| Material Dsg                                                                          | Color | Min. |       | H | H | R T I |      |     | H | D |   |
|---------------------------------------------------------------------------------------|-------|------|-------|---|---|-------|------|-----|---|---|---|
|                                                                                       |       | Thk  | Flame | W | A | Elec  | Mech | T   | 9 | C |   |
|                                                                                       |       | mm   | Class | I | I |       |      |     |   |   |   |
|                                                                                       |       |      |       |   |   | Imp   | Str  | R   | 5 | I |   |
| Silicone Rubber (SIR), addition-cure, vinyl, platinum catalyzed, furnished as sheets. |       |      |       |   |   |       |      |     |   |   |   |
| TMA-120                                                                               | ALL   | 0.2  | V-0   | 4 | 0 | 150   | 150  | 150 | - | - | 0 |
|                                                                                       |       | 3.0  | V-0   | - | - | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 3.3  | V-0   | - | 0 | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 6.4  | V-0   | 0 | - | 150   | 150  | 150 |   |   |   |
| TMA-1205                                                                              | ALL   | 0.2  | V-0   | 4 | 0 | 150   | 150  | 150 | - | - | 0 |
|                                                                                       |       | 3.0  | V-0   | - | - | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 3.3  | V-0   | - | 0 | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 6.4  | V-0   | 0 | - | 150   | 150  | 150 |   |   |   |
| TMA-2515                                                                              | ALL   | 0.2  | V-0   | 4 | 0 | 150   | 150  | 150 | - | - | 0 |
|                                                                                       |       | 3.0  | V-0   | - | - | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 3.3  | V-0   | - | 0 | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 6.4  | V-0   | 0 | - | 150   | 150  | 150 |   |   |   |
| TMA-5018                                                                              | ALL   | 0.2  | V-0   | 4 | 0 | 150   | 150  | 150 | - | - | 0 |
|                                                                                       |       | 3.0  | V-0   | - | - | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 3.3  | V-0   | - | 0 | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 6.4  | V-0   | 0 | - | 150   | 150  | 150 |   |   |   |
| TMA-X1501                                                                             | ALL   | 0.2  | V-0   | 4 | 0 | 150   | 150  | 150 | - | - | 0 |
|                                                                                       |       | 3.0  | V-0   | - | - | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 3.3  | V-0   | - | 0 | 150   | 150  | 150 |   |   |   |
|                                                                                       |       | 6.4  | V-0   | 0 | - | 150   | 150  | 150 |   |   |   |

|                   |     |     |     |   |   |     |     |     |   |   |   |
|-------------------|-----|-----|-----|---|---|-----|-----|-----|---|---|---|
| <b>TMA-xxxxxx</b> | ALL | 0.2 | V-0 | 4 | 0 | 150 | 150 | 150 | - | - | 0 |
|                   |     | 3.0 | V-0 | - | - | 150 | 150 | 150 |   |   |   |
|                   |     | 3.3 | V-0 | - | 0 | 150 | 150 | 150 |   |   |   |
|                   |     | 6.4 | V-0 | 0 | - | 150 | 150 | 150 |   |   |   |

xxxxxx - May or may not be replaced by six characters of any combination of any letters from A -Z denoting the basic color, and/or any numbers from 0-9 denoting the mixed color.

Marking: Company name and material designation on container, wrapper or finished part.

Last Updated on 2020-08-13

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